

Date: Monday, 1/7/2008 4:31:32 PM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: DOUBLER KIT		
Job Number	: 36652F		Part Number	: D314068		
Estimate Number	: 11455		Drawing Number	: D3140 REV F		
P.O. Number	:		Project Number	: N/A		
This Issue	: 1/7/2008	S.O. No. :	Drawing Revision	: F		
Prsht Rev.	: NC		Material	:		
First Issue	: / /	Type	: SMALL /MED FAB			
Previous Run	: 27340F		Due Date	: 2/28/2008	Qty:	1
Written By	:		Um:	Each		
Checked & Approved By	: <u>JK 08.01.8</u>					
Comment	: Est. B 02.11.13 Removed D3140-65/-81/-83; Added D3140-301K J Est. Rev C New dwg rev. ecn781 06.04.18 EC Est Rev:D As per ECN #829 06-11-20 JLM					

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :		
1.0	D314010	Doubler Assembly		
		 <b>Comment:</b> Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) Doubler Assembly Pick: Qty Part Number Description Batch 1 D3140-10 Doubler Assy <u>B 35159 x 2</u>		
2.0	D3140101	 <b>Comment:</b> Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s) Doubler Pick: Qty Part Number Description Batch 2 D3140-101 Doubler <u>B 35157 x 3</u>		
3.0	D3140241	 <b>Comment:</b> Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) Doubler Pick: Qty Part Number Description Batch 1 D3140-241 Doubler <u>B 18470 x 1 / B 27373 x 1</u>		
4.0	D3140303	 <b>Comment:</b> Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s) Doubler Pick		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services			Drawing Name: DOUBLER KIT
Job Number: 36652F		Part Number: D314068	
Job Number: 			
Seq. #:	Machine Or Operation:	Description :	
2	Qty Part Number Description Batch 2 D3140-303 Doubler <u>B 35158</u>		
5.0	D314087	Doubler 	
6.0	D314092	Doubler 	
7.0	D314095	Doubler 	
8.0	D314098	Doubler 	
9.0	D314099	Doubler 	

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Doubler  
Pick:  
Qty Part Number Description Batch  
1 D3140-87 Doubler B 35155 X 2 ✓

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Doubler  
Pick:  
Qty Part Number Description Batch  
1 D3140-91 Doubler B 27377 X ✓

Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)  
Doubler  
Pick:  
Qty Part Number Description Batch  
3 D3140-95 Doubler B 35154 X 8 adj ✓

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Doubler  
Pick:  
Qty Part Number Description Batch  
1 D3140-98 Doubler See W10! # 27340 E

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Doubler  
Pick:  
Qty Part Number Description Batch  
1 D3140-99 Doubler B 35156 X 1 ✓ / B 36761 X 1 ✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No  DQA:  Date: 08/02/26  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 1/7/2008 4:31:32 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOUBLER KIT

Job Number: 36652F

Part Number: D314068

Job Number:



Seq. #: Machine Or Operation:

Description :

10.0 D3140104 DOUBLER



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3140-104	Doubler	<u>B27343 x2</u> <u>B34378 x1</u>

11.0 D3140106 DOUBLER



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3140-106	Doubler	<u>B27344 x3</u>

12.0 QC4 INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

108/02/26

13.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

NIA Ship to deltek

108/02/25

14.0 QC21 FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

108/02/26

Job Completion



108/02/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. F
		D3140	SHEET 1 OF 7
DATE		TITLE	SCALE
06.10.06		DOOR	NTS
		A 02.04.18	NEW ISSUE
		B 03.01.23	REMOVE -65/-81/-83; ADD -301/-303
		C 04.11.08	CHANGE DELASTEK SPEC. TEC-77; ADD PART MARKING; ADD NOTES 11, 12, 13; CHANGE ANGLE -95/-97/-98 TO 106°
		D 05.11.23	ADD -103/-104/-105/-106; REMOVE -67
		E 06.06.09	1.75 WAS 1.88, 4.75 WAS 4.13 ON -08/-07, 1.00 WAS 1.20 ON -09/-10
		F 06.10.06	ADD NOTE 14; CORRECT PART TITLE, NOW D3140-09/-92/-104 SHOWN D3140-10/-91/-103 OPPOSITE

**RELEASED**  
06.11.13

QTY -05	QTY -06	QTY -07	QTY -08	QTY -09	QTY -10	PART NUMBER	DESCRIPTION		
X						D3140-05	DOOR		
	X					D3140-06	DOOR		
		X				D3140-07	DOOR		
			X			D3140-08	DOOR		
				1	X	D3140-09	DOUBLER ASSEMBLY		
					1	X	D3140-10	DOUBLER ASSEMBLY	
3	3					D3140-57	PAD		
1	1					D3140-59	PAD		
2	2					D3140-61	PAD		
2	2					D3140-63	PAD		
		1	1			D3140-69	PAD		
			1			D3140-71	PAD		
				1		D3140-73	PAD		
					1	D3140-75	PAD		
						D3140-77	PAD		
					1	D3140-79	PAD		
						1	ANGLE	SHOP COPY	
1	1					D3140-87	DOUBLER	RETURN TO	
					1	D3140-89	DOUBLER	ENGINEERING	
				1		D3140-91	DOUBLER	UNCONTROLLED COPY	
					1	D3140-92	DOUBLER	SUBJECT TO AMENDMENT	
3	3					D3140-95	DOUBLER	WITHOUT NOTICE	
1						D3140-97	DOUBLER	WORK ORDER	
	1					D3140-98	DOUBLER	NO. 306528	
		1	1			D3140-99	DOUBLER		
			2	2		D3140-101	DOUBLER		
			1			D3140-103	DOUBLER		
				1		D3140-104	DOUBLER		
					1	D3140-105	DOUBLER		
					1	D3140-106	DOUBLER		
1	1					D3140-241	DOUBLER		
1		1				D3140-301	DOUBLER		
	1		1			D3140-303	DOUBLER		
					5	5	MS20426AD3-4	RIVET	



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CHECKED	J.D.	APPROVED	J.D.	DRAWING NO. D3140
DATE	06.10.06			TITLE DOOR

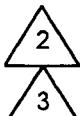
REV. F

SHEET 2 OF 7

NTS



COMPOSITE LAYUP & BONDING I.A.W. DELASTEK PROCESS SPEC. TEC-77  
 MATERIAL STORAGE & HANDLING TO BE I.A.W. DART QSI 006  
 MAIN LAYUP USES FIBERCOTE E-761/7781 EPOXY FIBERGLASS.  
 FILL WITH EPOCAST 87269 OR MAGNOBOND 77 A & B AND MA560 FOAM/ NB-51/30 FOAM



FINISH: DUPONT HIGHBUILD GREY PRIMER 1144-S



MAKE PARTS IN ACCORDANCE WITH THE FOLLOWING TOOLS/MOLDS:

PART	TOOL
D3140-05	B30-23000-01T
D3140-06	B30-23000-02T
D3140-07	B30-23000-03T
D3140-08	B30-23000-04T
D3140-57	B30-23000-57T
D3140-61	B30-23000-61T
D3140-63	B30-23000-63T
D3140-69	B30-23000-69T
D3140-71	B30-23000-71T
D3140-73	B30-23000-73T
D3140-75	B30-23000-75T
D3140-77	B30-23000-77T
D3140-79	B30-23000-79T
D3140-89	D3140-89T1
D3140-301	D3140-301T1
D3140-303	D3140-303T1

RELEASED

06.11.13



MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK (M2024T3S.032)  
 FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1



MATERIAL: 2024-T3 (QQ-A-250/4) 0.020 THICK (M2024T3S.020)  
 FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1



MATERIAL: 5052-H32/H34 (QQ-A-250/8) 0.040 THICK (M5052H32S.040)  
 FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1



MATERIAL: POLIMEX TR75 1" THICK 4.5 LB KLEGECCELL



ALL DIMENSIONS IN INCHES



TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (M6061-T6S.063)  
 FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1



DOUBLER TO SIT ON TOP OF FOAM AT THIS LOCATION



DOUBLER TO BE RECESSED FLUSH INTO FOAM AT THIS LOCATION



RUBBER STAMP WITH DART P/N D3140-05/-06/-07/-08 USING MIL-STD-130

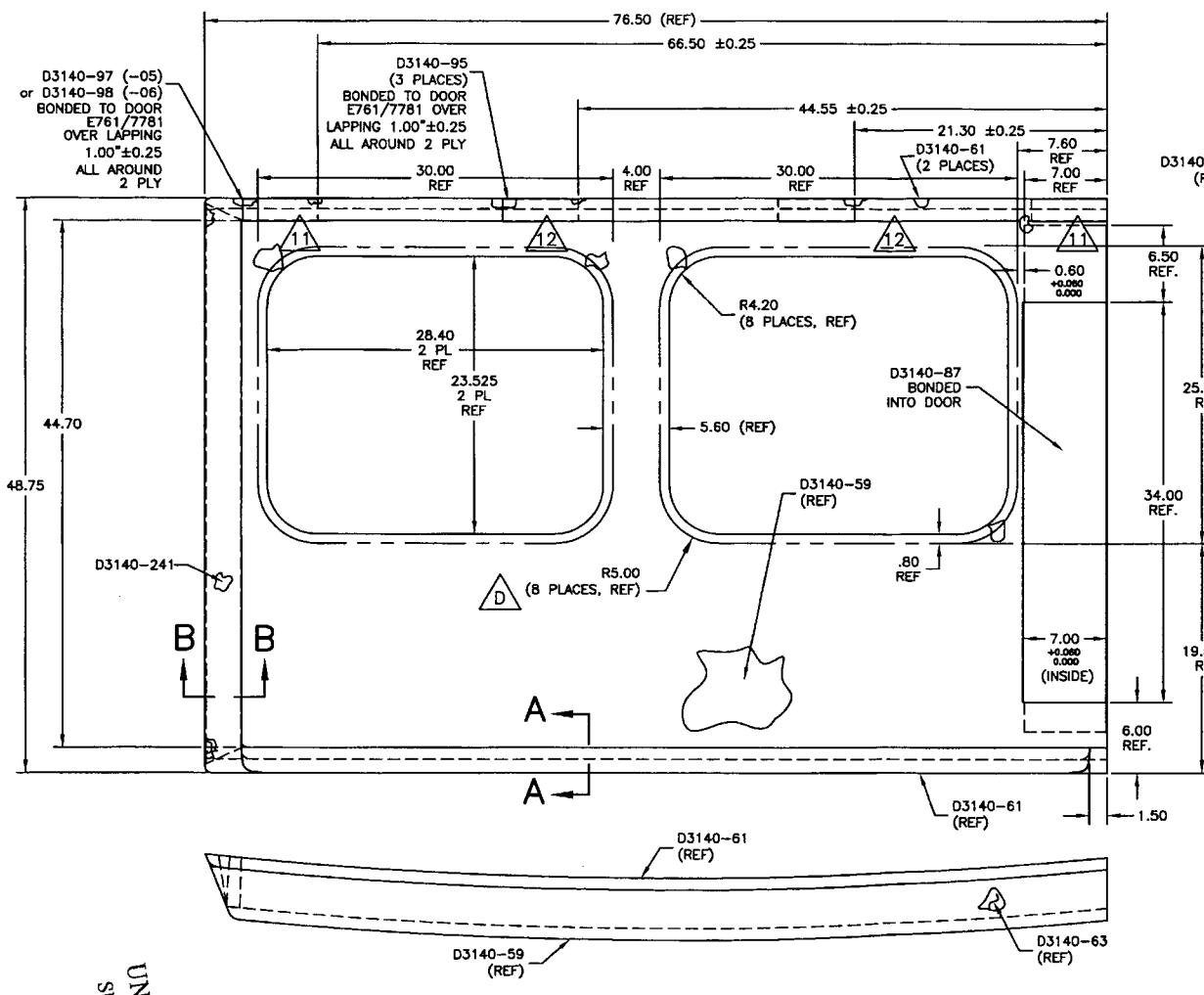
PARTS MUST BE SCUFFED WITH 80 GRIT SANDPAPER PRIOR TO ACID ETCH AND  
 ALODINE PER DART QSI 005 4.1

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 WITHOUT NOTICE  
 WORK ORDER  
 NO. 36652Z



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**D3140-05 DOOR (SHOWN, REPLACES PREMIER P/N B30-23000-05)**  
**D3140-06 DOOR (OPPOSITE, REPLACES PREMIER P/N B30-23000-06)**  
(WINDOWS & CUTOUTS TO BE LOCATED PER B30-23000-01T/-02T TOOL)

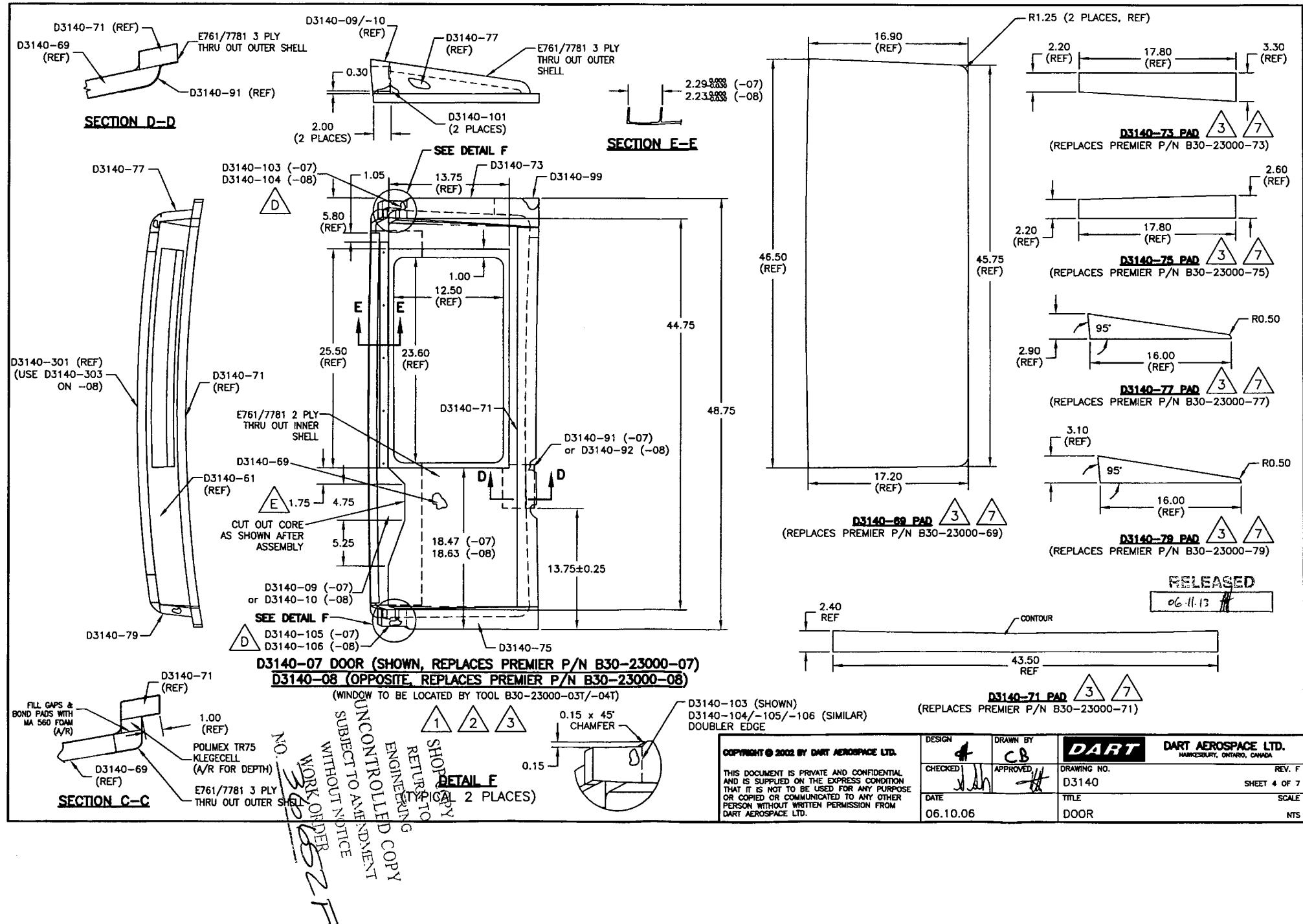
1 2 3

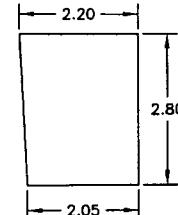
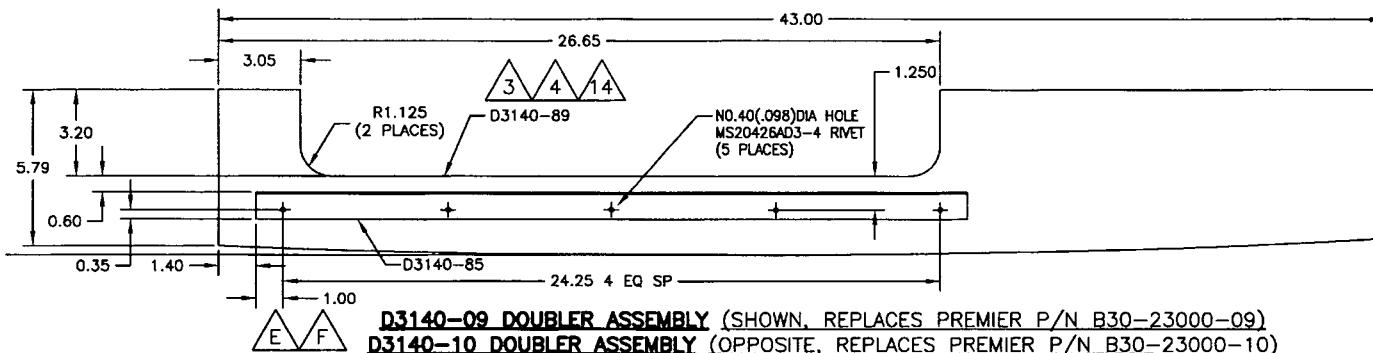
www.ams.org/ams/2017-ams-aeroplane-and

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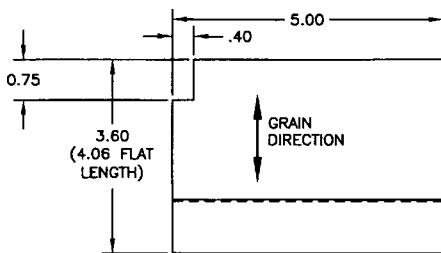
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CHECKED 	APPROVED 	DRAWING NO. <b>D3140</b>	REV. F SHEET 3 OF 7	
DATE <b>06.10.06</b>	TITLE <b>DOOR</b>	SCALE <b>NTS</b>		

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NO. 36652 F

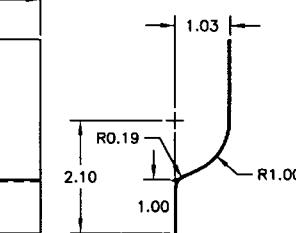


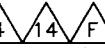


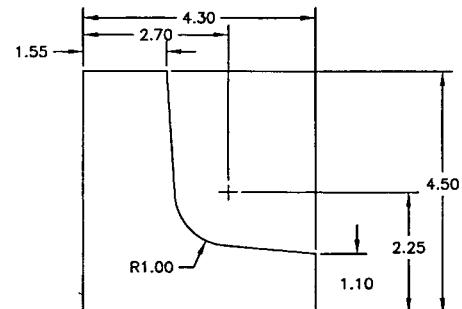
**D3140-101 DOUBLER**   
(REPLACES PREMIER P/N B30-23000-101)



**D3140-91F DOUBLER**  
(USE TO MAKE D3140-91/-92 DOUBLERS)



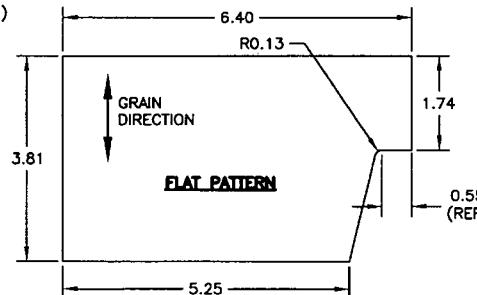
**D3140-92 DOUBLER**   
(SHOWN, REPLACES PREMIER P/N B30-23000-92)  
**D3140-91 DOUBLER**  
(OPPOSITE, REPLACES PREMIER P/N B30-23000-91)



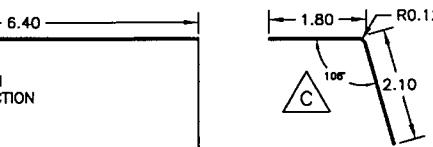
**D3140-99 DOUBLER**   
(REPLACES PREMIER P/N B30-23000-99)

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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER NO. 36652 F

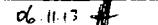
SHOP COPY  
RETURN TO  
ENGINEERING

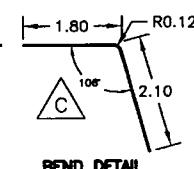


**D3140-97F DOUBLER**  
(USE TO MAKE D3140-97/-98 DOUBLERS)



**D3140-95 DOUBLER**   
(REPLACES PREMIER P/N B30-23000-95)

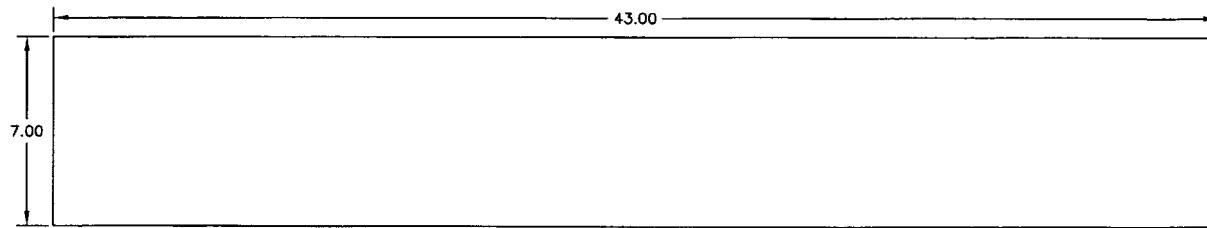
RELEASED  
06.11.13 



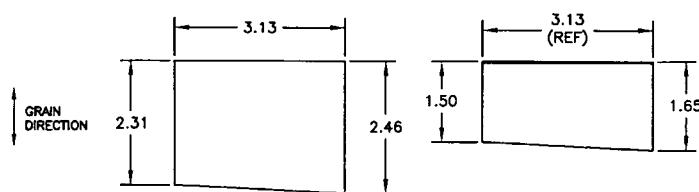
BEND DETAIL

**D3140-97 DOUBLER**   
(SHOWN, REPLACES PREMIER P/N B30-23000-97)  
**D3140-98 DOUBLER**  
(OPPOSITE, REPLACES PREMIER P/N B30-23000-98)

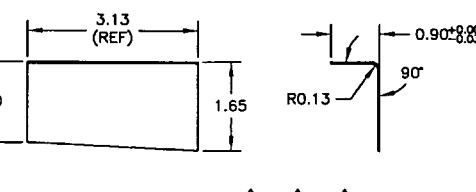
DESIGN	DRAWN BY	DART	DART AEROSPACE LTD. HANNOVER, ONTARIO, CANADA
4	CB		REV. F
CHECKED 	APPROVED 	DRAWING NO.	SHEET 5 OF 7
		D3140	NTS
DATE	TITLE		SCALE
06.10.06	DOOR		



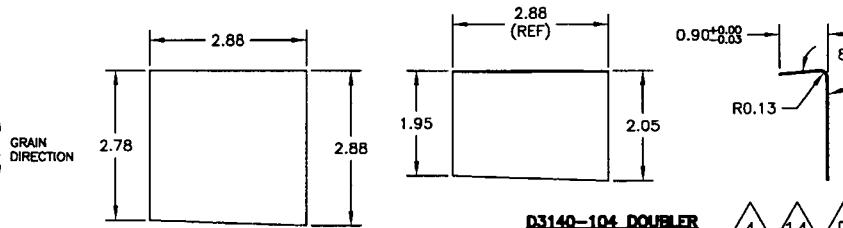
**D3140-87 DOUBLER** 4 4  
(REPLACES PREMIER P/N B30-23000-87)



**D3140-105F FLAT PATTERN**  
(USED TO MAKE D3140-105/-106 BRACKETS)

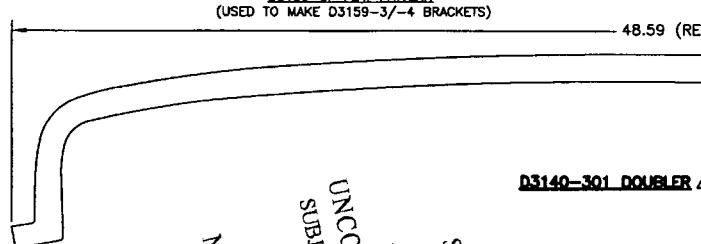


**D3140-105 DOUBLER**  
**D3140-106 OPPOSITE**



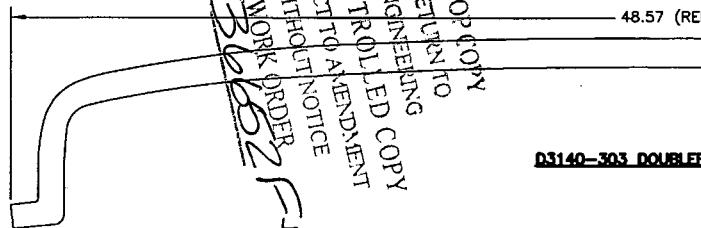
**D3140-103F FLAT PATTERN**  
(USED TO MAKE D3140-103/-104 BRACKETS)

**D3140-104 DOUBLER**  
**D3140-103 OPPOSITE**

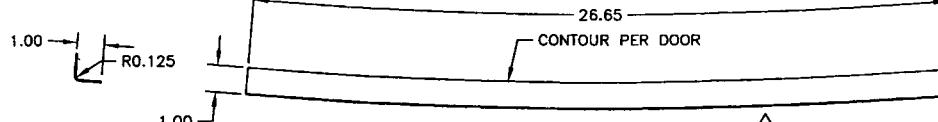


**D3140-301 DOUBLER** 3 10 14

RELEASED  
06.11.13



**D3140-303 DOUBLER** 3 10 14

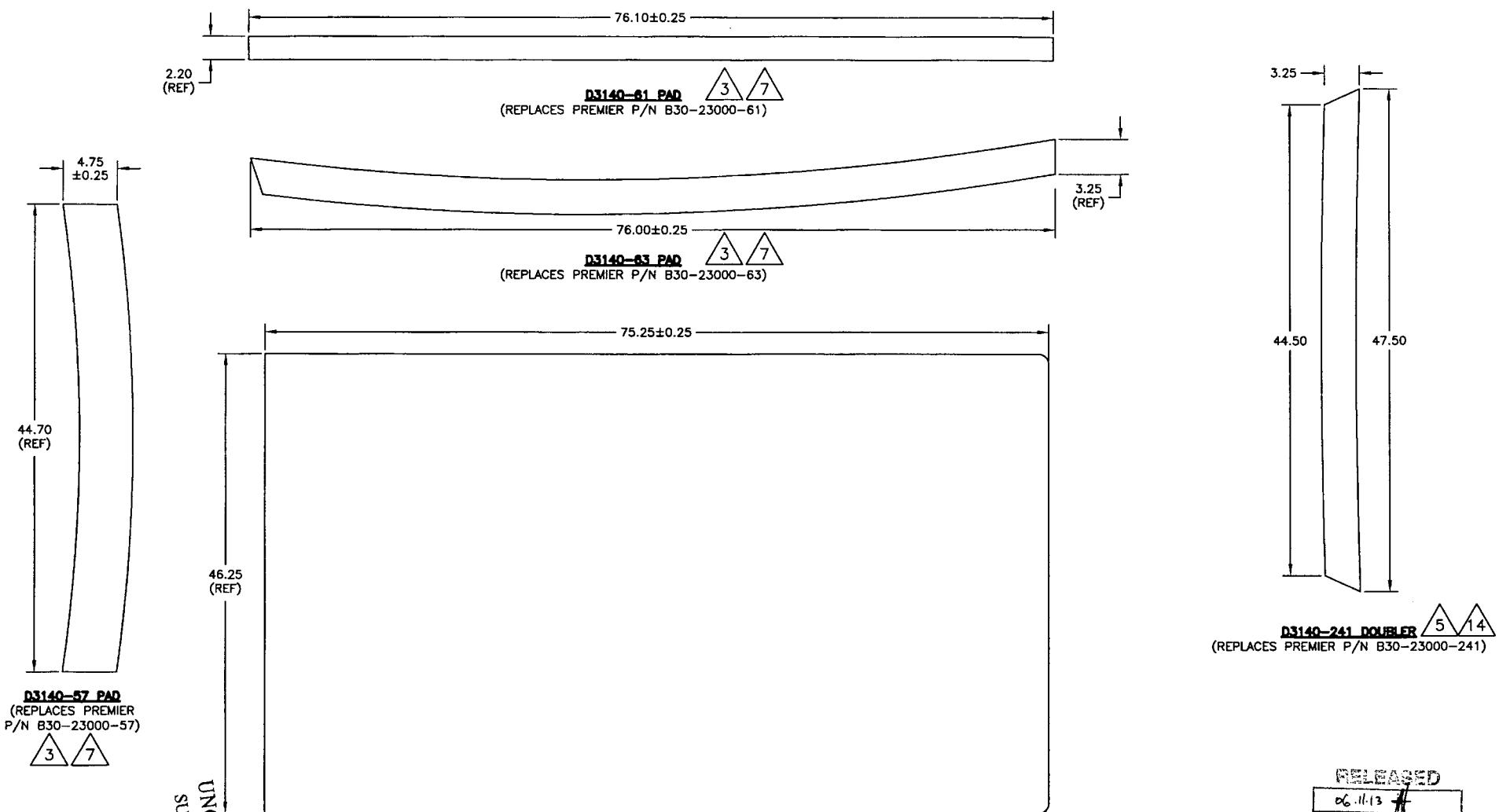


**D3140-85 ANGLE** 6  
FLAT PATTERN: 26.65" x 1.90"  
(REPLACES PREMIER P/N B30-23000-85)

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4	CB		REV. F
CHECKED	APPROVED	D3140	SHEET 6 OF 7
06.10.06		DATE	SCALE
		TITLE	
		DOOR	



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06.11.13

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NO. 36652  
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DESIGN	DRAWN BY	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
4	CB	REV. F DRAWING NO. D3140 SHEET 7 OF 7
DATE 06.10.06	APPROVED JH	SCALE TITLE DOOR

Dart Aerospace.

N° DE COMMANDE - ORDER NO.		DÉP. - DEPT.	DATE	08/01/16
VENDU À - SOLD TO		EXPÉDIÉ À - SHIP TO Dulcastek 2699 5 <sup>th</sup> Avenue East 14 Grand-Mere QC G9T-5K7		
ADRESSE - ADDRESS		ADRESSE - ADDRESS		
DATE D'EXPÉDITION - SHIPPING DATE	VIA	CONDITIONS - TERMS	N° D'ENR. DE TAXE - TAX REG. NO.	VENDEUR - SALESPERSON 819-533-5788 attn: Simon
1	D3140-99	B 36761 ✓		
1	D3140-09	B 34793 ✓		
1	D3140-87	B 35155 ✓		
2	D3140-301	B 36762		
to use on space door.				
thank Chantal.				
TPS/GST				
TVP/PST				
214545	SIGNATURE	N° LIC. - LIC. NO.	TOTAL	